

TWIN FALLS COUNTY CANCER PROFILE

*A fact sheet from the Cancer Data Registry
of Idaho, Idaho Hospital Association.*

**Cancer Incidence 2003-2007
Cancer Mortality 2004-2008
BRFSS 2000-2008**

CANCER

Cancer is a group of more than 100 different diseases, each characterized by uncontrolled growth and spread of abnormal cells. Cancer risk increases with age, and varies by gender and race. As the average age of the population increases, the incidence of cancer will increase as well.

It is generally accepted that 65-80% of all cancers are related to personal lifestyle or environmental factors, such as smoking and diet, and are therefore preventable. Other factors such as age, gender, and family history of specific cancers are also associated with cancer and aid in the identification of people at high risk.

For some cancers, effective treatment is available. For these cancers, early detection saves lives. For example, early detection of breast cancer in women 50 years of age and older has decreased breast cancer mortality by 30%. These patterns indicate opportunities for disease control and for reducing the number of cancer deaths through prevention, early detection, and treatment of the disease. Access to detection services is a key consideration.

RISK FACTORS AND INTERVENTIONS

Aging:

Because the population is aging, the number of new cancer cases and cancer deaths that occur each year will continue to increase unless the trend is reversed by significant improvements in prevention, early detection, and treatment.

Smoking:

Smoking and the use of smokeless tobacco are responsible for the majority of all cancers of the lung, trachea, bronchus, larynx, pharynx, oral cavity, and esophagus. Smoking is the leading cause of preventable death in the United States.

Diet:

The U.S. Department of Agriculture recommends the following dietary guidelines for managing a healthy diet: eat a variety of foods; maintain a healthy weight; choose a diet low in total fat with plenty of fruits, vegetables, and grain products; limit the use of sugar, salt, and sodium; and minimize alcoholic beverage consumption.

Screening:

Early detection is extremely important for those cancers that can be cured and which can be discovered early. Breast cancer is a good example of this, as stage at diagnosis is the strongest predictor for survival from breast cancer.

FOR MORE INFORMATION

Cancer Data Registry of Idaho
615 N. 7th Street
P.O. Box 1278
Boise, ID 83701
208-338-5100 Ext. 213
<http://www.idcancer.org>

National Cancer Institute
Cancer Information Services
1-800-4CANCER
<http://cis.nci.nih.gov>

American Cancer Society
2676 South Vista Avenue
Boise, ID 83705
208-343-4609
<http://www.cancer.org>

CANCER INCIDENCE 2003-2007

During the five-year period 2003-2007, 31,924 cases of invasive cancer were diagnosed among residents of the state of Idaho, 1,809 among Twin Falls County residents. It is estimated that almost one in two Idahoans will develop cancer during their lifetime.

| Cancer Incidence 2003-2007 | Twin Falls County | State of Idaho |
|----------------------------|-------------------|----------------|
| All Sites/Types | 1,809 | 31,924 |
| Prostate | 311 | 5,357 |
| Female Breast | 254 | 4,219 |
| Lung & Bronchus | 222 | 3,906 |
| Colorectal | 176 | 2,935 |

The table, *CANCER INCIDENCE 2003-2007, COMPARISON BETWEEN TWIN FALLS COUNTY AND THE REMAINDER OF THE STATE OF IDAHO*, shows for Twin Falls County the number of observed cases, person-years, crude rates, age and sex-adjusted rates, expected number of cases based upon age and sex-specific rates in the remainder of Idaho, and p-values for tests comparing the number of observed and expected cases. The table also shows the number of observed cases, person-years, and crude rates for the remainder of the state of

Idaho. Comparisons were made for all cancers combined, 23 invasive cancer types, in situ breast cancer, non-malignant brain and other central nervous system tumors and pediatric cancer. Separate comparisons for males, females, and both sexes combined are included.

As the table shows, the crude rate of invasive cancer incidence in Twin Falls County was 520.5 cases per 100,000 person-years for the years 2003-2007. Compared with the crude incidence rate for the remainder of Idaho (443.7), this gives an estimate of the burden of disease in Twin Falls County.

The age- and sex-adjusted incidence rate of invasive cancer in Twin Falls County, all sites combined, was 456.4 cases per 100,000 persons per year for the years 2003-2007. There were more cases of cancer in Twin Falls County (1,809) than expected (1,758.7) based upon rates in the remainder of the state, but the difference was not statistically significant.

There are many reasons why cancer incidence rates differ by county, related to smoking, other personal behaviors, socioeconomic status, and other factors.

CANCER MORTALITY 2004-2008

Cancer is the second leading cause of deaths in Idaho and in the United States. From 2004-2008, 11,781 persons in Idaho died from cancer, 723 in Twin Falls County. The majority of cancer deaths are from four primary sites: lung, colon, female breast, and prostate.

| Mortality 2004-2008 | Twin Falls County | State of Idaho |
|--|----------------------|-------------------------|
| All Deaths | 3,329 | 52,819 |
| Cancer Deaths % of All Deaths | 723 21.7% | 11,781 22.3% |
| Lung & Bronchus | 174 | 2,962 |
| Colorectal | 62 | 1,035 |
| Female Breast | 57 | 809 |
| Prostate | 51 | 777 |

The table, *CANCER MORTALITY 2004-2008, COMPARISON BETWEEN TWIN FALLS COUNTY AND THE REMAINDER OF THE STATE OF IDAHO*, shows for Twin Falls County the number of observed deaths, person-years, crude rates, age and sex-adjusted rates, expected number of deaths based upon age and sex-specific rates in the remainder of Idaho, and p-values for tests comparing the number of observed and expected deaths. The table also shows the number of observed deaths, person-years, and crude rates for the remainder of the state of Idaho. Comparisons were made for all deaths, all cancer deaths, and 21 specific cancer types. Separate comparisons for males, females, and both sexes combined are included.

The age- and sex-adjusted cancer mortality rate for Twin Falls County, all sites combined, was 167.8 deaths per 100,000 persons per year for the years 2004-2008, compared with 159.3 for the remainder of the state. There were more cancer deaths in Twin Falls County (723) than expected (686.6) based upon rates in the remainder of the state, but the difference was not statistically significant.

Statistical Note: Rates and percentages based upon 12 or fewer cases or deaths (numerator) should be interpreted with caution.

Data Note: Mortality data may differ slightly from published official statistics from the Bureau of Vital Records and Health Statistics.

CANCER INCIDENCE 2003-2007
COMPARISON BETWEEN TWIN FALLS COUNTY AND THE REMAINDER OF THE STATE OF IDAHO

| Cancer Site/Type | Sex | Twin Falls County | | | | | | Remainder of Idaho | | |
|-------------------------------------|--------|-------------------|--------------|----------------|-------------------|--------------------|-------------|--------------------|--------------|----------------|
| | | Observed Cases | Person Years | Crude Rate (1) | A.A.I. Rate (1,2) | Expected Cases (3) | P-Value (4) | Observed Cases | Person Years | Crude Rate (1) |
| All Sites Combined | Total | 1,809 | 347,529 | 520.5 | 456.4 | 1,758.7 | 0.236 | 30,115 | 6,787,265 | 443.7 |
| All Sites Combined | Male | 959 | 171,739 | 558.4 | 494.8 | 920.7 | 0.214 | 16,225 | 3,415,574 | 475.0 |
| All Sites Combined | Female | 850 | 175,790 | 483.5 | 423.1 | 827.7 | 0.446 | 13,890 | 3,371,691 | 412.0 |
| Bladder | Total | 69 | 347,529 | 19.9 | 16.4 | 84.9 | 0.089 | 1,371 | 6,787,265 | 20.2 |
| Bladder | Male | 55 | 171,739 | 32.0 | 27.1 | 62.3 | 0.389 | 1,048 | 3,415,574 | 30.7 |
| Bladder | Female | 14 | 175,790 | 8.0 | 6.4 | 20.9 | 0.149 | 323 | 3,371,691 | 9.6 |
| Brain - malignant | Total | 29 | 347,529 | 8.3 | 7.9 | 25.2 | 0.505 | 464 | 6,787,265 | 6.8 |
| Brain - malignant | Male | 13 | 171,739 | 7.6 | 7.3 | 13.1 | 1.000 | 252 | 3,415,574 | 7.4 |
| Brain - malignant | Female | 16 | 175,790 | 9.1 | 8.3 | 12.1 | 0.329 | 212 | 3,371,691 | 6.3 |
| Brain and other CNS - non-malignant | Total | 35 | 347,529 | 10.1 | 9.1 | 32.9 | 0.758 | 580 | 6,787,265 | 8.5 |
| Brain and other CNS - non-malignant | Male | 13 | 171,739 | 7.6 | 7.1 | 8.7 | 0.213 | 163 | 3,415,574 | 4.8 |
| Brain and other CNS - non-malignant | Female | 22 | 175,790 | 12.5 | 11.1 | 24.5 | 0.709 | 417 | 3,371,691 | 12.4 |
| Breast | Total | 256 | 347,529 | 73.7 | 66.9 | 226.7 | 0.059 | 4,018 | 6,787,265 | 59.2 |
| Breast | Male | 2 | 171,739 | 1.2 | 1.0 | 3.0 | 0.826 | 53 | 3,415,574 | 1.6 |
| Breast | Female | 254 | 175,790 | 144.5 | 130.3 | 229.3 | 0.113 | 3,965 | 3,371,691 | 117.6 |
| Breast - in situ | Total | 46 | 347,529 | 13.2 | 12.5 | 44.3 | 0.841 | 818 | 6,787,265 | 12.1 |
| Breast - in situ | Male | - | 171,739 | - | - | 0.2 | 1.000 | 4 | 3,415,574 | 0.1 |
| Breast - in situ | Female | 46 | 175,790 | 26.2 | 24.5 | 45.2 | 0.950 | 814 | 3,371,691 | 24.1 |
| Cervix | Female | 18 | 175,790 | 10.2 | 10.2 | 10.8 | 0.053 | 205 | 3,371,691 | 6.1 |
| Colorectal | Total | 176 | 347,529 | 50.6 | 42.9 | 166.9 | 0.502 | 2,759 | 6,787,265 | 40.6 |
| Colorectal | Male | 77 | 171,739 | 44.8 | 39.0 | 83.0 | 0.554 | 1,437 | 3,415,574 | 42.1 |
| Colorectal | Female | 99 | 175,790 | 56.3 | 46.6 | 83.2 | 0.100 | 1,322 | 3,371,691 | 39.2 |
| Corpus Uteri | Female | 45 | 175,790 | 25.6 | 23.1 | 42.3 | 0.718 | 731 | 3,371,691 | 21.7 |
| Esophagus | Total | 23 | 347,529 | 6.6 | 5.8 | 18.3 | 0.319 | 313 | 6,787,265 | 4.6 |
| Esophagus | Male | 20 | 171,739 | 11.6 | 10.4 | 14.5 | 0.199 | 259 | 3,415,574 | 7.6 |
| Esophagus | Female | 3 | 175,790 | 1.7 | 1.4 | 3.3 | 1.000 | 54 | 3,371,691 | 1.6 |
| Hodgkin Lymphoma | Total | 10 | 347,529 | 2.9 | 2.9 | 9.3 | 0.905 | 180 | 6,787,265 | 2.7 |
| Hodgkin Lymphoma | Male | 6 | 171,739 | 3.5 | 3.5 | 4.2 | 0.505 | 84 | 3,415,574 | 2.5 |
| Hodgkin Lymphoma | Female | 4 | 175,790 | 2.3 | 2.2 | 5.1 | 0.856 | 96 | 3,371,691 | 2.8 |
| Kidney and Renal Pelvis | Total | 42 | 347,529 | 12.1 | 10.8 | 52.7 | 0.154 | 922 | 6,787,265 | 13.6 |
| Kidney and Renal Pelvis | Male | 18 | 171,739 | 10.5 | 9.6 | 32.1 | 0.010 << | 586 | 3,415,574 | 17.2 |
| Kidney and Renal Pelvis | Female | 24 | 175,790 | 13.7 | 11.9 | 20.1 | 0.437 | 336 | 3,371,691 | 10.0 |
| Larynx | Total | 15 | 347,529 | 4.3 | 3.9 | 11.3 | 0.344 | 199 | 6,787,265 | 2.9 |
| Larynx | Male | 12 | 171,739 | 7.0 | 6.4 | 8.7 | 0.334 | 157 | 3,415,574 | 4.6 |
| Larynx | Female | 3 | 175,790 | 1.7 | 1.5 | 2.4 | 0.883 | 42 | 3,371,691 | 1.2 |
| Leukemia | Total | 54 | 347,529 | 15.5 | 13.4 | 56.1 | 0.850 | 945 | 6,787,265 | 13.9 |
| Leukemia | Male | 37 | 171,739 | 21.5 | 18.9 | 31.5 | 0.366 | 548 | 3,415,574 | 16.0 |
| Leukemia | Female | 17 | 175,790 | 9.7 | 8.3 | 24.2 | 0.161 | 397 | 3,371,691 | 11.8 |
| Liver and Bile Duct | Total | 18 | 347,529 | 5.2 | 4.6 | 14.9 | 0.491 | 261 | 6,787,265 | 3.8 |
| Liver and Bile Duct | Male | 10 | 171,739 | 5.8 | 5.4 | 10.0 | 1.000 | 184 | 3,415,574 | 5.4 |
| Liver and Bile Duct | Female | 8 | 175,790 | 4.6 | 3.8 | 4.8 | 0.218 | 77 | 3,371,691 | 2.3 |
| Lung and Bronchus | Total | 222 | 347,529 | 63.9 | 54.1 | 222.7 | 1.000 | 3,684 | 6,787,265 | 54.3 |
| Lung and Bronchus | Male | 122 | 171,739 | 71.0 | 61.2 | 116.6 | 0.644 | 1,998 | 3,415,574 | 58.5 |
| Lung and Bronchus | Female | 100 | 175,790 | 56.9 | 47.7 | 104.9 | 0.681 | 1,686 | 3,371,691 | 50.0 |
| Melanoma of the Skin | Total | 91 | 347,529 | 26.2 | 24.2 | 88.3 | 0.799 | 1,590 | 6,787,265 | 23.4 |
| Melanoma of the Skin | Male | 61 | 171,739 | 35.5 | 32.7 | 50.5 | 0.167 | 924 | 3,415,574 | 27.1 |
| Melanoma of the Skin | Female | 30 | 175,790 | 17.1 | 16.0 | 37.0 | 0.286 | 666 | 3,371,691 | 19.8 |
| Myeloma | Total | 14 | 347,529 | 4.0 | 3.5 | 20.9 | 0.148 | 351 | 6,787,265 | 5.2 |
| Myeloma | Male | 8 | 171,739 | 4.7 | 4.1 | 12.5 | 0.252 | 217 | 3,415,574 | 6.4 |
| Myeloma | Female | 6 | 175,790 | 3.4 | 2.9 | 8.3 | 0.565 | 134 | 3,371,691 | 4.0 |
| Non-Hodgkin Lymphoma | Total | 64 | 347,529 | 18.4 | 15.8 | 75.1 | 0.219 | 1,259 | 6,787,265 | 18.5 |
| Non-Hodgkin Lymphoma | Male | 35 | 171,739 | 20.4 | 18.0 | 37.6 | 0.756 | 661 | 3,415,574 | 19.4 |
| Non-Hodgkin Lymphoma | Female | 29 | 175,790 | 16.5 | 13.8 | 37.3 | 0.195 | 598 | 3,371,691 | 17.7 |
| Oral Cavity and Pharynx | Total | 65 | 347,529 | 18.7 | 17.0 | 39.7 | 0.000 >> | 704 | 6,787,265 | 10.4 |
| Oral Cavity and Pharynx | Male | 46 | 171,739 | 26.8 | 25.0 | 27.5 | 0.002 >> | 510 | 3,415,574 | 14.9 |
| Oral Cavity and Pharynx | Female | 19 | 175,790 | 10.8 | 9.4 | 11.6 | 0.057 | 194 | 3,371,691 | 5.8 |
| Ovary | Female | 34 | 175,790 | 19.3 | 16.8 | 26.2 | 0.163 | 437 | 3,371,691 | 13.0 |
| Pancreas | Total | 39 | 347,529 | 11.2 | 9.4 | 47.8 | 0.227 | 783 | 6,787,265 | 11.5 |
| Pancreas | Male | 21 | 171,739 | 12.2 | 10.8 | 22.8 | 0.814 | 399 | 3,415,574 | 11.7 |
| Pancreas | Female | 18 | 175,790 | 10.2 | 8.3 | 24.8 | 0.194 | 384 | 3,371,691 | 11.4 |
| Prostate | Male | 311 | 171,739 | 181.1 | 160.4 | 286.4 | 0.158 | 5,046 | 3,415,574 | 147.7 |
| Stomach | Total | 18 | 347,529 | 5.2 | 4.4 | 20.1 | 0.753 | 334 | 6,787,265 | 4.9 |
| Stomach | Male | 13 | 171,739 | 7.6 | 6.6 | 13.2 | 1.000 | 229 | 3,415,574 | 6.7 |
| Stomach | Female | 5 | 175,790 | 2.8 | 2.4 | 6.6 | 0.716 | 105 | 3,371,691 | 3.1 |
| Testis | Male | 12 | 171,739 | 7.0 | 7.2 | 10.6 | 0.747 | 217 | 3,415,574 | 6.4 |
| Thyroid | Total | 27 | 347,529 | 7.8 | 7.7 | 44.7 | 0.006 << | 869 | 6,787,265 | 12.8 |
| Thyroid | Male | 5 | 171,739 | 2.9 | 2.9 | 9.4 | 0.183 | 185 | 3,415,574 | 5.4 |
| Thyroid | Female | 22 | 175,790 | 12.5 | 12.6 | 35.6 | 0.020 << | 684 | 3,371,691 | 20.3 |
| Pediatric Age 0 to 19 | Total | 15 | 103,352 | 14.5 | 14.4 | 19.5 | 0.371 | 386 | 2,057,889 | 18.8 |
| Pediatric Age 0 to 19 | Male | 10 | 52,410 | 19.1 | 19.0 | 9.8 | 1.000 | 196 | 1,052,578 | 18.6 |
| Pediatric Age 0 to 19 | Female | 5 | 50,942 | 9.8 | 9.8 | 9.7 | 0.163 | 190 | 1,005,311 | 18.9 |

Notes: 1. Rates are expressed as the number of cases per 100,000 persons per year (person-years).
2. Age and sex-adjusted incidence (A.A.I.) rates for county use age and sex-specific crude rates for the remainder of the state as standard.
3. Expected cases are based upon age and sex-specific rates for the remainder of the state of Idaho (compare to observed).
4. P-values compare observed and expected cases, are two tailed, based upon the Poisson probability distribution.
"<<" denotes significantly fewer cases observed than expected, ">>" denotes significantly more cases observed than expected (p=.05).

Statistical Note: Rates based upon 12 or fewer cases (numerator) should be interpreted with caution.

CANCER MORTALITY 2004-2008
COMPARISON BETWEEN TWIN FALLS COUNTY AND THE REMAINDER OF THE STATE OF IDAHO

| Cause of Death Cancer Site/Type | Sex | Twin Falls County | | | | | | Remainder of Idaho | | |
|------------------------------------|--------|--------------------|-----------------|-------------------|----------------------|------------------------|-------------|--------------------|-----------------|-------------------|
| | | Observed Deaths | Person Years | Crude Rate (1) | A.A.M. Rate (1,2) | Expected Deaths (3) | P-Value (4) | Observed Deaths | Person Years | Crude Rate (1) |
| All Causes of Death | Total | 3,329 | 355,117 | 937.4 | 732.7 | 3,239.7 | 0.120 | 49,490 | 6,940,483 | 713.1 |
| All Causes of Death | Male | 1,637 | 175,580 | 932.3 | 765.5 | 1,534.8 | 0.010 >> | 25,075 | 3,493,773 | 717.7 |
| All Causes of Death | Female | 1,692 | 179,537 | 942.4 | 707.5 | 1,694.0 | 0.974 | 24,415 | 3,446,710 | 708.4 |
| All Malignant Cancers | Total | 723 | 355,117 | 203.6 | 167.8 | 686.6 | 0.173 | 11,058 | 6,940,483 | 159.3 |
| All Malignant Cancers | Male | 368 | 175,580 | 209.6 | 176.4 | 349.6 | 0.338 | 5,854 | 3,493,773 | 167.6 |
| All Malignant Cancers | Female | 355 | 179,537 | 197.7 | 160.6 | 333.7 | 0.255 | 5,204 | 3,446,710 | 151.0 |
| Bladder | Total | 19 | 355,117 | 5.4 | 4.1 | 18.8 | 1.000 | 284 | 6,940,483 | 4.1 |
| Bladder | Male | 13 | 175,580 | 7.4 | 5.9 | 13.4 | 1.000 | 211 | 3,493,773 | 6.0 |
| Bladder | Female | 6 | 179,537 | 3.3 | 2.5 | 5.1 | 0.807 | 73 | 3,446,710 | 2.1 |
| Brain and Other Nervous System | Total | 22 | 355,117 | 6.2 | 5.7 | 19.7 | 0.664 | 354 | 6,940,483 | 5.1 |
| Brain and Other Nervous System | Male | 7 | 175,580 | 4.0 | 3.8 | 9.7 | 0.506 | 182 | 3,493,773 | 5.2 |
| Brain and Other Nervous System | Female | 15 | 179,537 | 8.4 | 7.5 | 10.0 | 0.171 | 172 | 3,446,710 | 5.0 |
| Breast | Total | 57 | 355,117 | 16.1 | 13.5 | 46.0 | 0.130 | 756 | 6,940,483 | 10.9 |
| Breast | Male | - | 175,580 | - | - | 0.2 | 1.000 | 4 | 3,493,773 | 0.1 |
| Breast | Female | 57 | 179,537 | 31.7 | 26.5 | 47.0 | 0.171 | 752 | 3,446,710 | 21.8 |
| Cervix | Female | 3 | 179,537 | 1.7 | 1.6 | 3.8 | 0.934 | 71 | 3,446,710 | 2.1 |
| Colorectal | Total | 62 | 355,117 | 17.5 | 14.1 | 61.4 | 0.977 | 973 | 6,940,483 | 14.0 |
| Colorectal | Male | 18 | 175,580 | 10.3 | 8.7 | 28.6 | 0.046 << | 481 | 3,493,773 | 13.8 |
| Colorectal | Female | 44 | 179,537 | 24.5 | 19.2 | 32.6 | 0.066 | 492 | 3,446,710 | 14.3 |
| Corpus Uteri | Female | 4 | 179,537 | 2.2 | 1.8 | 4.8 | 0.949 | 76 | 3,446,710 | 2.2 |
| Esophagus | Total | 22 | 355,117 | 6.2 | 5.4 | 17.5 | 0.332 | 297 | 6,940,483 | 4.3 |
| Esophagus | Male | 19 | 175,580 | 10.8 | 9.7 | 13.6 | 0.188 | 242 | 3,493,773 | 6.9 |
| Esophagus | Female | 3 | 179,537 | 1.7 | 1.4 | 3.5 | 1.000 | 55 | 3,446,710 | 1.6 |
| Hodgkin Lymphoma | Total | 3 | 355,117 | 0.8 | 0.8 | 1.4 | 0.338 | 26 | 6,940,483 | 0.4 |
| Hodgkin Lymphoma | Male | 3 | 175,580 | 1.7 | 1.7 | 0.5 | 0.028 >> | 10 | 3,493,773 | 0.3 |
| Hodgkin Lymphoma | Female | - | 179,537 | - | - | 0.9 | 0.794 | 16 | 3,446,710 | 0.5 |
| Kidney | Total | 21 | 355,117 | 5.9 | 5.0 | 15.8 | 0.243 | 261 | 6,940,483 | 3.8 |
| Kidney | Male | 10 | 175,580 | 5.7 | 5.0 | 9.2 | 0.883 | 160 | 3,493,773 | 4.6 |
| Kidney | Female | 11 | 179,537 | 6.1 | 5.0 | 6.4 | 0.127 | 101 | 3,446,710 | 2.9 |
| Larynx | Total | 3 | 355,117 | 0.8 | 0.7 | 3.3 | 1.000 | 55 | 6,940,483 | 0.8 |
| Larynx | Male | 3 | 175,580 | 1.7 | 1.5 | 2.5 | 0.889 | 43 | 3,493,773 | 1.2 |
| Larynx | Female | - | 179,537 | - | - | 0.7 | 0.955 | 12 | 3,446,710 | 0.3 |
| Leukemia | Total | 37 | 355,117 | 10.4 | 8.5 | 32.3 | 0.447 | 512 | 6,940,483 | 7.4 |
| Leukemia | Male | 23 | 175,580 | 13.1 | 11.0 | 16.6 | 0.161 | 278 | 3,493,773 | 8.0 |
| Leukemia | Female | 14 | 179,537 | 7.8 | 6.2 | 15.4 | 0.848 | 234 | 3,446,710 | 6.8 |
| Liver and Bile Duct | Total | 20 | 355,117 | 5.6 | 4.9 | 15.2 | 0.278 | 259 | 6,940,483 | 3.7 |
| Liver and Bile Duct | Male | 17 | 175,580 | 9.7 | 8.7 | 9.8 | 0.046 >> | 176 | 3,493,773 | 5.0 |
| Liver and Bile Duct | Female | 3 | 179,537 | 1.7 | 1.4 | 5.2 | 0.465 | 83 | 3,446,710 | 2.4 |
| Lung and Bronchus | Total | 174 | 355,117 | 49.0 | 40.7 | 171.6 | 0.873 | 2,788 | 6,940,483 | 40.2 |
| Lung and Bronchus | Male | 99 | 175,580 | 56.4 | 47.9 | 91.5 | 0.462 | 1,549 | 3,493,773 | 44.3 |
| Lung and Bronchus | Female | 75 | 179,537 | 41.8 | 34.2 | 78.9 | 0.712 | 1,239 | 3,446,710 | 35.9 |
| Melanoma of the Skin | Total | 13 | 355,117 | 3.7 | 3.1 | 12.7 | 1.000 | 213 | 6,940,483 | 3.1 |
| Melanoma of the Skin | Male | 8 | 175,580 | 4.6 | 4.0 | 8.4 | 1.000 | 148 | 3,493,773 | 4.2 |
| Melanoma of the Skin | Female | 5 | 179,537 | 2.8 | 2.3 | 4.1 | 0.780 | 65 | 3,446,710 | 1.9 |
| Myeloma | Total | 12 | 355,117 | 3.4 | 2.7 | 15.1 | 0.512 | 239 | 6,940,483 | 3.4 |
| Myeloma | Male | 5 | 175,580 | 2.8 | 2.3 | 8.7 | 0.270 | 141 | 3,493,773 | 4.0 |
| Myeloma | Female | 7 | 179,537 | 3.9 | 3.2 | 6.3 | 0.887 | 98 | 3,446,710 | 2.8 |
| Non-Hodgkin Lymphoma | Total | 27 | 355,117 | 7.6 | 6.1 | 29.0 | 0.809 | 453 | 6,940,483 | 6.5 |
| Non-Hodgkin Lymphoma | Male | 19 | 175,580 | 10.8 | 9.0 | 14.5 | 0.294 | 239 | 3,493,773 | 6.8 |
| Non-Hodgkin Lymphoma | Female | 8 | 179,537 | 4.5 | 3.5 | 14.3 | 0.105 | 214 | 3,446,710 | 6.2 |
| Oral Cavity and Pharynx | Total | 11 | 355,117 | 3.1 | 2.6 | 10.5 | 0.953 | 173 | 6,940,483 | 2.5 |
| Oral Cavity and Pharynx | Male | 8 | 175,580 | 4.6 | 4.1 | 6.3 | 0.595 | 113 | 3,493,773 | 3.2 |
| Oral Cavity and Pharynx | Female | 3 | 179,537 | 1.7 | 1.3 | 4.1 | 0.833 | 60 | 3,446,710 | 1.7 |
| Ovary | Female | 18 | 179,537 | 10.0 | 8.3 | 19.5 | 0.843 | 310 | 3,446,710 | 9.0 |
| Pancreas | Total | 40 | 355,117 | 11.3 | 9.3 | 45.7 | 0.448 | 736 | 6,940,483 | 10.6 |
| Pancreas | Male | 16 | 175,580 | 9.1 | 7.9 | 20.9 | 0.337 | 361 | 3,493,773 | 10.3 |
| Pancreas | Female | 24 | 179,537 | 13.4 | 10.6 | 24.7 | 0.996 | 375 | 3,446,710 | 10.9 |
| Prostate | Male | 51 | 175,580 | 29.0 | 21.9 | 48.4 | 0.746 | 726 | 3,493,773 | 20.8 |
| Stomach | Total | 11 | 355,117 | 3.1 | 2.6 | 12.6 | 0.789 | 204 | 6,940,483 | 2.9 |
| Stomach | Male | 7 | 175,580 | 4.0 | 3.4 | 7.3 | 1.000 | 126 | 3,493,773 | 3.6 |
| Stomach | Female | 4 | 179,537 | 2.2 | 1.8 | 5.1 | 0.835 | 78 | 3,446,710 | 2.3 |

Notes: 1. Rates are expressed as the number of cases per 100,000 persons per year (person-years).

2. Age and sex-adjusted mortality (A.A.M.) rates for county use age and sex-specific crude rates for the remainder of the state as standard.

3. Expected cases are based upon age and sex-specific rates for the remainder of the state of Idaho (compare to observed).

4. P-values compare observed and expected cases, are two tailed, based upon the Poisson probability distribution.

"<<" denotes significantly fewer cases observed than expected, ">>" denotes significantly more cases observed than expected (p=.05).

Statistical Notes: Rates based upon 12 or fewer cases (numerator) should be interpreted with caution.

Mortality statistics presented differ from BVRHS official statistics due to differences in methodology.

Data Source: Bureau of Vital Records and Health Statistics (BVRHS), Division of Health, Idaho Department of Health and Welfare, 2009.

Cancer Screening and Risk Factors: Behavioral Risk Factor Surveillance System (BRFSS)

The Bureau of Vital Records and Health Statistics (BVRHS), Division of Health, Idaho Department of Health and Welfare, under a cooperative agreement with the Centers for Disease Control and Prevention, has conducted telephone Behavioral Risk Factor Surveys (BRFS) since 1984 of random samples of adult Idahoans to measure population prevalences of risk factors for the major causes of death, including cancer. The BVRHS provided data sets containing BRFSS data from 2000 through 2008 to CDRI staff, who performed the analyses reported in these *County Profiles*. Data were weighted by probability of selection, and poststratified to 2008 Idaho population estimates by age group, sex, and county. Not all questions were asked in all years. Beginning in 2005, the BRFS was offered in both Spanish and English. A minimum of 30 respondents was required to generate county-level statistics. The cancer screening and risk factor measures were selected to assist in monitoring *Comprehensive Cancer Alliance for Idaho* objectives.

BRFSS: Cancer Screening and Risk Factor Prevalence Estimates, 2000-2008

| | State of Idaho | HD 1 | HD 2 | HD 3 | HD 4 | HD 5 | HD 6 | HD 7 | Twin Falls County |
|--|----------------|-------|-------|-------|-------|-------|-------|-------|-------------------|
| Access to Care | | | | | | | | | |
| No Health Insurance, Age <65 | 19.5% | 22.5% | 19.6% | 24.3% | 15.2% | 24.7% | 16.3% | 18.0% | 22.0% |
| Cancer Screening | | | | | | | | | |
| Mammogram Past 2 Years, Age 50+ | 71.8% | 71.5% | 71.7% | 66.7% | 78.3% | 68.8% | 70.9% | 67.9% | 73.0% |
| Mammogram and CBE Past 2 Years, Age 40+ | 62.5% | 62.5% | 62.4% | 58.8% | 69.9% | 59.1% | 58.8% | 56.8% | 61.8% |
| Pap Test Past 3 Years, Cervix Intact | 80.7% | 82.0% | 80.6% | 81.5% | 85.9% | 77.2% | 77.5% | 72.1% | 77.0% |
| Sigmoidoscopy/Colonoscopy Past 5 Years, Age 50+ | 41.9% | 40.4% | 47.2% | 36.9% | 48.4% | 39.1% | 36.6% | 39.0% | 40.7% |
| Prostate-Specific Antigen Test Past 2 Years, Age 50+ | 64.9% | 60.6% | 62.6% | 62.1% | 71.3% | 66.9% | 62.2% | 62.3% | 65.6% |
| Tobacco Use | | | | | | | | | |
| Current Smoker | 18.8% | 21.8% | 18.8% | 20.7% | 18.4% | 20.8% | 17.0% | 13.0% | 22.3% |
| Current Smokeless Tobacco User | 4.4% | 5.4% | 5.6% | 4.6% | 4.2% | 4.8% | 3.7% | 3.2% | 3.6% |
| Other Cancer-Related | | | | | | | | | |
| Sufficient Moderate/Vigorous Physical Activity | 58.8% | 57.9% | 58.9% | 55.0% | 60.8% | 57.9% | 58.3% | 61.1% | 57.7% |
| Eat 5+ Servings Fruits & Veggies / Day | 21.6% | 22.0% | 22.4% | 19.2% | 23.0% | 22.8% | 20.7% | 20.4% | 23.3% |
| Neither Obese Nor Overweight (BMI<25.0) | 40.1% | 39.0% | 39.6% | 36.4% | 42.9% | 39.9% | 39.0% | 41.3% | 38.4% |
| Sunburn in Previous 12 Months | 47.3% | 45.1% | 46.1% | 42.1% | 47.7% | 46.7% | 50.0% | 54.4% | 46.4% |
| BRFSS Respondents | 45,701 | 6,622 | 6,523 | 6,475 | 6,593 | 6,514 | 6,509 | 6,465 | 2,630 |

Access to Care

Health Insurance – 2000 to 2008

Statewide, 19.5% of adults aged 18-64 reported having no health care coverage. Health care coverage differed significantly by race/ethnicity, with 17.8% of white non-Hispanics, compared to 41.2% of Hispanics and 32.8% of Native Americans, lacking health insurance. Spanish-speaking respondents were significantly more likely to be uninsured (78.6%) than English-speaking respondents (18.6%). Health care coverage differed significantly by age of respondent, with 30.5% of persons aged 18-24, and 13.0% of persons aged 55-64, lacking health insurance. Health care coverage differed significantly by county, with a range of 11.7% (Oneida County) to 35.2% (Owyhee County) lacking health insurance. Counties with higher proportions of uninsured had significantly higher rates of invasive cancer.

Cancer Screening

Mammogram – 2000, 2002, 2004, 2006-2008

Statewide, 71.8% of women aged 50 and older reported having a mammogram in the past 2 years. Mammography rates differed significantly by county, with a range in screening of 50.2% (Butte County) to 85.8% (Teton County). In 2008, Idaho had the 6th lowest mammography screening rate among states for women aged 50 and older.

Mammogram and CBE – 2000, 2002, 2004, 2006, 2008

Statewide, 62.5% of women aged 40 and older reported having a mammogram and clinical breast exam (CBE) in the past 2 years. Screening rates differed significantly by age of

respondent, with 69.3% of women aged 55-64, but only 50.4% of women aged 40-44, being screened. Mammogram/CBE utilization differed significantly by county, with a range in screening of 42.6% (Butte) to 70.8% (Blaine County).

Pap Test – 2000, 2002, 2004, 2006, 2008

Statewide, 80.7% of women aged 18 and older (with intact cervix) reported having a Pap test in the past 3 years. Pap screening differed significantly by age of respondent, with 89.5% of women aged 25-34, but only 62.8% of women aged 65 and older, screened in the past 3 years. Pap screening did not differ significantly by race/ethnicity. Pap screening decreased significantly from 84.1% in 2000 to 77.8% in 2008. Pap screening differed significantly by county, with a range of 58.8% (Madison County) to 90.1% (Blaine County). In 2008, Idaho had the third lowest Pap screening rate among states.

Sigmoidoscopy/Colonoscopy – 2001-2002, 2004, 2006-2008

Statewide, 41.9% of adults aged 50 and older reported having a sigmoidoscopy or colonoscopy within the past 5 years. This type of colorectal cancer screening differed significantly by age of respondent, with 26.6% of persons aged 50-54, and 50.9% of persons aged 65 and older being screened. Males (43.4%) were more likely to have been screened than females (40.5%). Persons with health insurance were almost three times more likely to be screened. There was a significant trend by year of survey, from 33.0% in 2001 to 47.1% in 2008. Screening differed significantly by county, with a range of 22.4% (Gem County) to 55.4% (Nez Perce County). In 2008, Idaho ranked 46th among states in the percentage of adults aged 50 and older who reported ever having a sigmoidoscopy or colonoscopy.

Cancer Screening and Risk Factors: Behavioral Risk Factor Surveillance System (BRFSS)

Prostate-Specific Antigen (PSA) Test – 2001-2002, 2004, 2006, 2008

Statewide, 64.9% of males aged 50 and older reported having a PSA test in the past 2 years to screen for prostate cancer. PSA test utilization differed significantly by age of respondent, with 48.3% of males aged 50-54 and 73.0% of males aged 65 and older screened in the past 2 years. PSA test utilization differed significantly by race/ethnicity, with 65.4% of white non-Hispanics, compared to 50.9% of Hispanics and 50.6% of Native Americans, screened in the past 2 years. In 2008, Idaho ranked 35th among states (1st = highest) in the proportion of males aged 40+ who had a PSA test within the past two years.

Tobacco Use

Current Smoking – 2000 to 2008

Statewide, 18.8% of adults aged 18 and older were current smokers. Smoking prevalence differed significantly by age of respondent, with 22.8% of persons aged 18-24, and 9.0% of persons aged 65 and older reporting current smoking. About twenty percent of males (20.1%) and 17.4% of females were current smokers, and smoking prevalence was lower among white non-Hispanics (18.3%) than among Native Americans (37.8%). There was a significant trend by year of survey, with lower smoking rates in more recent years. Smoking prevalence differed significantly by county, with a range of 3.7% (Madison County) to 26.1% (Shoshone County). Counties with higher rates of current smoking had significantly higher rates of lung cancer.

Smokeless Tobacco Use – 2000-2001, 2003-2006

Statewide, 4.4% of adults aged 18 and older were current users of smokeless tobacco. Smokeless tobacco use differed significantly by race/ethnicity, ranging from 2.1% among Hispanics to 8.5% among Native Americans. Smokeless tobacco use differed significantly by age group, ranging from 6.9% of persons aged 25-34 to 1.4% of persons aged 65 and older. Almost nine percent of males (8.6%) and 0.2% of females were current users of smokeless tobacco. There was no significant trend by year of survey. Smokeless tobacco use differed significantly by county, with a range of 0.7% (Madison County) to 20.1% (Camas County).

Other Cancer-Related

Physical Activity – 2001, 2003, 2005

Statewide, 58.8% of adults aged 18 and older exercised the recommended amount (30 minutes or more per day of moderate physical activity on 5 or more days per week or 20 minutes or more of vigorous physical activity on 3 or more days per week). White non-Hispanics (59.3%) were more likely to exercise the recommended amount than Hispanics (51.2%). Physical activity differed significantly by age of respondent, with 67.9% of persons aged 18-24, but only 47.4% of persons aged 65+, exercising the recommended amount. Males (61.4%) were significantly more likely to exercise the recommended amount than females (56.2%). Physical activity differed significantly by county, with a range of 49.1% (Idaho County) to 81.6% (Valley County) exercising the recommended amount.

Fruit & Vegetable Consumption – 2000, 2002-2003, 2005, 2007 Statewide, 21.6% of adults aged 18 and older reported eating 5 or more servings of fruits and vegetables per day. Fruit and vegetable consumption differed significantly by race/ethnicity, with 19.2% of Hispanics and 33.4% of Native Americans eating 5 or more servings per day. Males (16.4%) were significantly less likely to eat 5-a-day than females (26.9%). 5-a-day consumption differed significantly by age of respondent, with 17.7% of persons aged 18-24, and 30.9% of persons aged 65+ eating 5-a-day. 5-a-day consumption differed significantly by county, with a range of 14.8% (Owyhee County) to 30.7% (Camas County).

Body Mass Index – 2000 to 2008

Statewide, 40.1% of adults aged 18 and older were neither obese nor overweight as measured by body mass index (BMI <25). BMI differed significantly by race/ethnicity, with 40.4% of white non-Hispanics, compared to 35.6% of Hispanics and 32.0% of Native Americans, being neither obese nor overweight. Males (32.1%) were significantly less likely to have the recommended BMI than females (48.6%). BMI differed significantly by age of respondent, with 63.1% of persons aged 18-24, and 29.3% of persons aged 55-64, being neither obese nor overweight. BMI increased at a dramatic rate in Idaho, with 46.2% of adults in 2000 compared to 35.9% in 2008 being neither obese nor overweight. BMI differed significantly by county, with a range of 30.8% (Lewis County) to 57.7% (Blaine County) being neither obese nor overweight. Counties with higher rates of recommended BMI (neither obese nor overweight) had significantly lower rates of colorectal cancer.

Sun Exposure – 2003-2004, 2008

Statewide, 47.3% of adults aged 18 and older reported having sunburn in the past 12 months. Sunburn rates were higher for white non-Hispanics (48.8%) than for Hispanics (30.4%) or Native Americans (44.9%). Males (52.3%) were significantly more likely than females (42.5%) to have had sunburn in the past 12 months. Sunburn rates differed significantly by age group, with 69.3% of persons aged 18-24 and 13.8% of persons aged 65 and older having sunburn in the past 12 months. Sunburn rates differed significantly by county, with a range of 23.7% (Butte County) to 65.0% (Teton County) having sunburn in the past 12 months.

